



SEQUENCE LISTING

<110> Berzofsky, Jay A.
Belyakov, Igor M.
Derby, Michael A.
Kelsall, Brian L.
Strober, Warren

THE GOVERNMENT OF THE UNITED STATES OF AMERICA, as

<120> MUCOSAL CYTOTOXIC T LYMPHOCYTE RESPONSES

<130> 368200PCSEQ

<140> PCT/US98/

<141> 1998-09-11

<150> 60/058,523

<151> 1997-09-11

<150> 60/074,894

<151> 1998-02-17

<160> 20

<170> PatentIn Ver. 2.0

<210> 1

<211> 35

<212> PRT

<213> Human immunodeficiency virus type 1

<400> 1

Glu	Gln	Met	His	Glu	Asp	Ile	Ile	Ser	Leu	Trp	Asp	Gln	Ser	Leu	Lys
1				5				10						15	

Pro	Cys	Val	Lys	Arg	Ile	Gln	Arg	Gly	Pro	Gly	Arg	Ala	Phe	Val	Thr
			20					25						30	

Ile	Gly	Lys
		35

<210> 2

<211> 39

<212> PRT

<213> Human immunodeficiency virus type 1

<400> 2

Lys Gln Ile Ile Asn Met Trp Gln Glu Val Gly Lys Ala Met Tyr Ala
1 5 10 15

Pro Pro Ile Ser Gly Gln Ile Arg Arg Ile Gln Arg Gly Pro Gly Arg
20 25 30

Ala Phe Val Thr Ile Gly Lys
35

<210> 3

<211> 39

<212> PRT

<213> Human immunodeficiency virus type 1

<400> 3

Arg Asp Asn Trp Arg Ser Glu Leu Tyr Lys Tyr Lys Val Val Lys Ile
1 5 10 15

Glu Pro Leu Gly Val Ala Pro Thr Arg Ile Gln Arg Gly Pro Gly Arg
20 25 30

Ala Phe Val Thr Ile Gly Lys
35

<210> 4

<211> 48

<212> PRT

<213> Human immunodeficiency virus type 1

<400> 4

Ala Val Ala Glu Gly Thr Asp Arg Val Ile Glu Val Val Gln Gly Ala
1 5 10 15

Tyr Arg Ala Ile Arg His Ile Pro Arg Arg Ile Arg Gln Gly Leu Glu
20 25 30

Arg Arg Ile Gln Arg Gly Pro Gly Arg Ala Phe Val Thr Ile Gly Lys
35 40 45

<210> 5

<211> 42

<212> PRT

<213> Human immunodeficiency virus type 1

<400> 5

Asp Arg Val Ile Glu Val Val Gln Gly Ala Tyr Arg Ala Ile Arg His
1 5 10 15

Ile Pro Arg Arg Ile Arg Gln Gly Leu Glu Arg Arg Ile Gln Arg Gly
20 25 30

Pro Gly Arg Ala Phe Val Thr Ile Gly Lys
35 40

<210> 6

<211> 30

<212> PRT

<213> Human immunodeficiency virus type 1

<400> 6

Asp Arg Val Ile Glu Val Val Gln Gly Ala Tyr Arg Ala Ile Arg Arg
1 5 10 15

Ile Gln Arg Gly Pro Gly Arg Ala Phe Val Thr Ile Gly Lys
20 25 30

<210> 7

<211> 32

<212> PRT

<213> Human immunodeficiency virus type 1

<400> 7

Ala Gln Gly Ala Tyr Arg Ala Ile Arg His Ile Pro Arg Arg Ile Arg
1 5 10 15

Arg Ile Gln Arg Gly Pro Gly Pro Arg Ala Phe Val Thr Ile Gly Lys
20 25 30

<210> 8

<211> 35

<212> PRT

<213> Human immunodeficiency virus type 1

<400> 8

Glu Gln Met His Glu Asp Ile Ile Ser Leu Trp Asp Gln Ser Leu Lys
1 5 10 15

Pro Cys Val Lys Arg Ile His Ile Gly Pro Gly Arg Ala Phe Tyr Thr
20 25 30

Thr Lys Asn
35

<210> 9

<211> 39

<212> PRT

<213> Human immunodeficiency virus type 1

<400> 9

Lys Gln Ile Ile Asn Met Trp Gln Glu Val Gly Lys Ala Met Tyr Ala
1 5 10 15

Pro Pro Ile Ser Gly Gln Ile Arg Arg Ile His Ile Gly Pro Gly Arg
20 25 30

Ala Phe Tyr Thr Thr Lys Asn
35

<210> 10

<211> 39

<212> PRT

<213> Human immunodeficiency virus type 1

<400> 10

Arg Asp Asn Trp Arg Ser Glu Leu Tyr Lys Tyr Lys Val Val Lys Ile
1 5 10 15

Glu Pro Leu Gly Val Ala Pro Thr Arg Ile His Ile Gly Pro Gly Arg
20 25 30

Ala Phe Tyr Thr Thr Lys Asn
35

<210> 11

<211> 48

<212> PRT

<213> Human immunodeficiency virus type 1

<400> 11

Ala Val Ala Glu Gly Thr Asp Arg Val Ile Glu Val Val Gln Gly Ala
 1 5 10 15

Tyr Arg Ala Ile Arg His Ile Pro Arg Arg Ile Arg Gln Gly Leu Glu
 20 25 30

Arg Arg Ile His Ile Gly Pro Gly Arg Ala Phe Tyr Thr Thr Lys Asn
 35 40 45

<210> 12

<211> 42

<212> PRT

<213> Human immunodeficiency virus type 1

<400> 12

Asp Arg Val Ile Glu Val Val Gln Gly Ala Tyr Arg Ala Ile Arg His
 1 5 10 15

Ile Pro Arg Arg Ile Arg Gln Gly Leu Glu Arg Arg Ile His Ile Gly
 20 25 30

Pro Gly Arg Ala Phe Tyr Thr Thr Lys Asn
 35 40

<210> 13

<211> 30

<212> PRT

<213> Human immunodeficiency virus type 1

<400> 13

Asp Arg Val Ile Glu Val Val Gln Gly Ala Tyr Arg Ala Ile Arg Arg
 1 5 10 15

Ile His Ile Gly Pro Gly Arg Ala Phe Tyr Thr Thr Lys Asn
 20 25 30

<210> 14

<211> 31

<212> PRT

<213> Human immunodeficiency virus type 1

<400> 14

Ala Gln Gly Ala Tyr Arg Ala Ile Arg His Ile Pro Arg Arg Ile Arg
1 5 10 15

Arg Ile His Ile Gly Pro Gly Arg Ala Phe Tyr Thr Thr Lys Asn
20 25 30

<210> 15

<211> 15

<212> PRT

<213> Human immunodeficiency virus type 1

<400> 15

Arg Ile Gln Arg Gly Pro Gly Arg Ala Phe Val Thr Ile Gly Lys
1 5 10 15

<210> 16

<211> 10

<212> PRT

<213> Human immunodeficiency virus type 1

<400> 16

Arg Gly Pro Gly Arg Ala Phe Val Thr Ile
1 5 10

<210> 17

<211> 20

<212> PRT

<213> Human immunodeficiency virus type 1

<400> 17

Glu Gln Met His Glu Asp Ile Ile Ser Leu Trp Asp Gln Ser Leu Lys
1 — 5 10 15

Pro Cys Val Lys

20

<210> 18

<211> 24

<212> PRT

<213> Human immunodeficiency virus type 1

<400> 18

Lys Gln Ile Ile Asn Met Trp Gln Glu Val Gly Lys Ala Met Tyr Ala
1 5 10 15

Pro Pro Ile Ser Gly Gln Ile Arg
20

<210> 19

<211> 24

<212> PRT

<213> Human immunodeficiency virus type 1

<400> 19

Arg Asp Asn Trp Arg Ser Glu Leu Tyr Lys Tyr Lys Val Val Lys Ile
1 5 10 15

Glu Pro Leu Gly Val Ala Pro Thr
20

<210> 20

<211> 33

<212> PRT

<213> Human immunodeficiency virus type 1

<400> 20

Ala Val Ala Glu Gly Thr Asp Arg Val Ile Glu Val Val Gln Gly Ala
1 5 10 15

Tyr Arg Ala Ile Arg His Ile Pro Arg Arg Ile Arg Gln Gly Leu Glu
20 25 30

Arg